This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (withdrawn) A method of manufacturing a low expansion material, comprising the steps of: filling a mold with unsintered SiC particles; and casting a melt of an Al material in the mold.

2. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 1, wherein the Al material is pure Al.

3. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 1, wherein the Al material is an Al alloy containing Si.

4. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 1, wherein a low expansion material having a thermal expansion coefficient of 12×10^{-6} /K or lower and a heat conductivity of 200 W/m·K or higher is obtained by choosing the volume percentage of the SiC particles in the mold, the Si content of the melt, and the melt temperature appropriately.

5. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 2, wherein the melt temperature is set to a level higher than the melting point of the Al material used by 50K or more.

6. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 1, wherein two or more kinds of SiC particles having different grain sizes are packed in the mold by closest packing.

7. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 1, wherein the mold is pre-heated to enhance the heat efficiency during casting.

8. (withdrawn) A method of manufacturing a low expansion material as claimed in claim 7, wherein the mold is made of Fe, the pre-heating temperature being set to 700 to 950°C, the melt temperature being set to 700 to 950°C.

9. (withdrawn) A semiconductor device comprising:

a substrate formed of a low expansion material that is produced by the method of claim 1; and a semiconductor element joined to the top face of the substrate.

10. (withdrawn) A semiconductor device as claimed in claim 9, further comprising: an insulating layer and a wiring layer formed on a surface of the substrate in order, the semiconductor element being joined through solder to the top face of the wiring layer.

11. (currently amended) A semiconductor device comprising:

a circuit board;

a heat spreader which is formed of a low expansion material including two or more kinds of SiC particles having different mean grain sizes and an Al material, the heat spreader being joined to the top face of the circuit board; and

a semiconductor element mounted onto the heat spreader.

12. (original) A semiconductor device as claimed in claim 11, wherein the circuit board is composed of a metal substrate with an insulating layer and a wiring layer formed on its surface in order,

the heat spreader being joined to the top face of the wiring layer through solder,

the semiconductor element being joined to the top face of the heat spreader through solder.

13. (withdrawn) A semiconductor device comprising: a circuit board; a semiconductor element mounted onto the circuit board; and a heat releasing plate which is formed of a low expansion material produced by the method of claim 1 and is joined to the underside of the circuit board.

14. (withdrawn) A semiconductor device as claimed in claim 13, wherein the circuit board is composed of a ceramic substrate with Al wiring layers on both sides thereof, the heat releasing plate being joined to a surface of one Al wiring layer through solder, the semiconductor element being joined to a surface of the other Al wiring layer through solder.

15. (new) A semiconductor device comprising:

a circuit board;

a heat spreader which is formed of a low expansion material including two or more kinds of SiC particles having different mean grain sizes and an Al material, the heat spreader being joined to the top face of the circuit board; and

a semiconductor element mounted onto the heat spreader;

wherein the two or more kinds of SiC particles having different mean grain sizes comprise SiC particles with a mean grain size of 100 microns and SiC particles with a mean grain size of 8 microns.

16. (new) A semiconductor device as claimed in claim 15, wherein the circuit board is composed of a metal substrate with an insulating layer and a wiring layer formed on its surface in order,

the heat spreader being joined to the top face of the wiring layer through solder,

the semiconductor element being joined to the top face of the heat spreader through solder.